OP06.08. Intelligent recognition of fetal brain planes and automatic measurements of fetal brain parameters by three-dimensional ultrasound.

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Introduction

Smart Planes

Automatically display:
1. Trans-Cerebellar Plane (TCP)
2. Trans-Thalamic Plane (TTP)
3. Mid-Sagittal Plane (MSP)
4. Trans-Ventricular Plane (TVP)

Automatically measure:
1. Biparietal diameter (BPD)
2. Occipitofrontal diameter (OFD)
3. Head circumference (HC)
4. The width of the cisterna magna (CM)
5. Transcerebellar diameter (TCD)
6. The width of the lateral ventricles (LVW)

The Workflow

1. Acquire a 3D fetal head dataset from the axial view
2. Press the Smart Planes tab to acquire the four general standard planes
3. Press the Auto Measure button to acquire the six measurements

Conclusion

3D Smart planes are easy to operate, time-saving, relatively accurate, thus feasible for rapid evaluation of fetal brain. This clinical trials demonstrated that Smart Planes can significantly simplify the process of fetal brain examination and assist doctors with an efficient and accurate diagnosis.